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FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)			
	10/583,273	YOSHIKAWA, TADASHI			
Office Action Summary	Examiner	Art Unit			
	CECILE VO	2169			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 16 Jul     This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-26 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-26 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or  Application Papers  9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 16 June 2006 is/are: a)  Applicant may not request that any objection to the or	vn from consideration.  r election requirement.  r.  ⊠ accepted or b) □ objected to				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 06/16/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te			

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#### **DETAILED ACTION**

1. This is a non-final Office Action in response to the present US application number 10/583,273, filed on 06/16/2006, which is a national stage entry of PCT/JP04/09107 International Filing Date: 06/28/2004, which claims foreign priority of JAPAN 2003-423735, filed on December 19, 2003.

2. Claims 1-26 are presented for examination, with claims 1, 2, 7, 14, 15 and 20 being independent.

## **Priority**

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Claim Objections

4. Claims 12-13 and 25-26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claims 12 and 25 recite "A data storage system", claims 13 and 26 recite "An information processing system".

Claims 12 and 13 appear to be independent but include the features of an information transmitter in claim 7. Claims 25 and 26 appear to be independent but include the features of an information transmitter in claim 20. Applicant is respectfully suggested to amend the claim(s) to place the claim(s) in proper independent form.

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## Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 7 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 7 and 20 are directed to a system comprising software per se. Software per se is not one of the four categories of invention. Software per se is not a series of steps or acts and thus is not a process. Software per se is not a physical article or object and as such is not a machine or manufacture. Software per se is not a combination of substances and thus, is not a composition of matter.

### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Igarashi et al. (hereinafter referred to as Igarashi), US Pub. Number 2004/0122866A1.

Regarding claim 1, Igarashi discloses a data storage device having a storage means for storing acquired data in a hierarchical structure (see abstract, lines 1-5), comprising:

an image pickup unit (e.g. data control structure memory means 6, Fig. 2, that stores therein a data control structure owned by data of memory means 2, §0035, lines 3-5);

an extraction means for extracting a piece of code information from a piece of image data acquired by picking up an image by the image pickup unit (e.g. the common defined information among plural image data is extracted to be the folder name, §0069, lines 6-7. In the defined information reading means of the file control program, image data "DSCN001.jpg or the like (as a piece of code information) in folder of a data provider are analyzed, and defined information recorded previously in or attached to respective image data are read, §0068, lines 1-5); and

a name generation means for generating a folder name or a file name relating to the piece of image data based on the piece of code information extracted by the extraction means (e.g. in the folder name generating means, a name of the folder that stores therein image data is generated in accordance with a rule determined beforehand, referring to defined information obtained through reading, §0069, lines 1-3 and 9-11).

Regarding claim 2, Igarashi discloses a data storage device having a storage means for storing acquired data in a hierarchical structure (see abstract, lines 1-5), comprising:

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an image pickup unit (e.g. data control structure memory means 6, Fig. 2, that stores therein a data control structure owned by data of memory means 2, §0035, lines 3-5);

a code recognition unit having a table in which pieces of code information is respectively corresponded to a plurality of pieces of image data (e.g. the image data are generated by a camera maker in its own form, in the case of a digital camera (i.e. DCF, DPOF, EXIF and Picture CD forms), §0065, lines 1-13);

an extraction means for extracting a piece of the code information, from the table, corresponding to a piece of the image data acquired by picking up an image by the image pickup unit (e.g. a folder name creating means that creates the name of the folder that controls a file from the defined information that was read from file in specific forms such as DCF, DPOF, EXIF and Picture CD forms, §0067, lines 3-13. The folder name generating also mean , a name of the folder that stores therein image data is generated in accordance with a rule (for example, the priority order of defined information is determined, and the defined information having the common defined information among plural image data is extracted to be the folder name, §0069, lines 1-7); and

a name generation means for generating a folder name or a file name relating to the piece of the image data based on the piece of the code information extracted by the extraction means (e.g. in the folder name generating means, a name of the folder that stores therein image data is generated in accordance with a rule determined beforehand, referring to defined information obtained through reading, §0069, lines 1-3

and 9-11).

Regarding claim 3, Igarashi discloses the data storage device, further comprising a determination means for determining whether or not the piece of the code information is extracted by the extraction means, wherein when the determination means determines that the piece of the code information is not extracted by the extraction means, the name generation means generates the folder name or the file name relating to the piece of the image data based on predetermined information (0062, lines 1-5).

Regarding claim 5, Igarashi discloses the data storage device, further comprising:

a folder generation means for generating in the storage means a folder of the folder name generated by the name generation means (§0069, lines 1-3); and

a name changing means for changing the folder name or the file name relating to data stored in the storage means, to the folder name or the file name generated by the name generation means (§0052, lines 4-15).

Regarding claim 6, Igarashi discloses the data storage device, further comprising a reception means for receiving a selection of a first or second processing, wherein when the reception means receives the selection of the first processing, the folder generation means generates in the storage means the folder of the folder name generated by the name generation means (§0062, lines 1-5), and when the reception means receives the selection of the second processing, the name changing means

changes the folder name or the file name relating to the data stored in the storage means, to the folder name or the file name generated by the name generation means (§0063, lines 1-11).

Regarding claim 7, Igarashi discloses an information transmitter that transmits information to outside, comprising:

an image pickup unit (e.g. photographing equipment such as a digital camera and a camera-fitted cellphone, §0031, lines 12-14);

a code acquisition means for acquiring a code from a piece of image data obtained by picking up an image by the image pickup unit (e.g. the image data are generated by a camera maker in its own form, in the case of a digital camera (i.e. DCF, DPOF, EXIF and Picture CD form), §0065, lines 1-13);

an analyzing means for analyzing the code acquired by the code acquisition means and acquires a piece of code information (e.g. in the defined information reading means of the fie control program, image data ("DSCN0001.jpg" or the like - as a piece of code information) in folder of a data provider are analyzed and defined information recorded previously in or attached to respective image data are read, §0068, lines 1-5); and

a transmission means for transmitting to outside the piece of code information acquired by the analyzing means (e.g. the defined information is one determined in advance in accordance with a form of the file, and its concrete example to be uses, §0068, lines 6-8).

Regarding claim 8, Igarashi discloses the information transmitter, further comprising:

a display means for displaying the piece of code information acquired by the analyzing means (§0004, lines 1-9); and

an instruction reception means for receiving an instruction whether or not the piece of code information displayed on the display means is transmitted, wherein the transmission means transmits the piece of code information when an instruction to transmit the piece of code information is received by the instruction reception means (§0004, lines 1-9).

Regarding claim 9, Igarashi discloses the information transmitter, further comprising an encoding means for encoding the piece of code information acquired by the analyzing means, wherein the transmission means sends the piece of code information encoded by the encoding means (e.g. image data are displayed on an at sight basis by an application in many cases, and in that case, thumbnail image data wherein a data size of image data is reduced is used, §0055, lines 4-7).

Regarding claim 10, Igarashi discloses the information transmitter, further comprising:

a plurality of analyzing means respectively corresponding to different codes (§0041, lines 1-6); and

a selection means for selecting, based on the code acquired by the code acquisition means, an analyzing means to analyze the code from the plurality of analyzing means (§0051, lines 7-21), wherein

the analyzing means selected by the selection means analyzes the code acquired by the code acquisition means (§0051, lines 1-21).

Regarding claim 11, Igarashi discloses the information transmitter, further comprising a storage means for storing the code acquired by the code acquisition means and the piece of code information acquired by analyzing the code by the analyzing means, for each analyzing means selected by the selection means (§0041, lines 1-15).

Regarding claim 12, Igarashi discloses a data storage system (e.g. computer device, Fig. 1), comprising:

the information transmitter according claim 7 (e.g. the Bus 5 in Fig. 1); and a data storage device for storing data in a hierarchical structure (e.g. memory 2 in Fig. 1), the data storage device comprising:

a reception means for receiving the piece of code information transmitted from the information transmitter (§0035, lines 1-29); and

a name generation means for generating a folder name or a file name relating to the data, based on the piece of code information received by the reception means (§0069, lines 1-3).

Regarding claim 13, Igarashi discloses an information processing system, comprising:

the information transmitter (e.g. the Bus 5 in Fig. 1), and an information processor for performing a predetermined processing based on the piece of code information transmitted from the information transmitter (e.g. CPU 4 in Fig. 1).

Regarding claim 14, Igarashi discloses a data storage device having recording medium that stores acquired data in a hierarchical structure (e.g. memory 2), comprising:

an image pickup unit (e.g. data control structure memory means 6, Fig. 2, that stores therein a data control structure owned by data of memory means 2, §0035, lines 3-5); and

a controller (e.g. data control structures 8 and 9, Fig. 2) capable of:

extracting a piece of code information from a piece of image data acquired by picking up an image by the image pickup unit (e.g. the common defined information among plural image data is extracted to be the folder name, §0069, lines 6-7. In the defined information reading means of the file control program, image data "DSCN001.jpg or the like (as a piece of code information) in folder of a data provider are analyzed, and defined information recorded previously in or attached to respective image data are read, §0068, lines 1-5), and

generating a folder name or a file name relating to the piece of image data, based on the piece of code information thus extracted (e.g. in the folder name

generating means, a name of the folder that stores therein image data is generated in accordance with a rule determined beforehand, referring to defined information obtained through reading, §0069, lines 1-3 and 9-11).

Regarding claim 15, Igarashi discloses a data storage device having a recording medium that stores acquired data in a hierarchical structure, comprising:

an image pickup unit (e.g. data control structure memory means 6, Fig. 2, that stores therein a data control structure owned by data of memory means 2, §0035, lines 3-5);

a code recognition unit having a table in which pieces of code information are respectively corresponded to a plurality of pieces of image data (e.g. data reading means 7, Fig. 2, that reads data through photographing equipment, §0035, lines 5-6); and

a controller (e.g. data control structures 8 and 9, Fig. 2) capable of:

extracting a piece of the code information, from the table, corresponding to a piece of the image data acquired by picking up an image by the image pickup unit (e.g. the common defined information among plural image data is extracted to be the folder name, §0069, lines 6-7. In the defined information reading means of the file control program, image data "DSCN001.jpg or the like (as a piece of code information) in folder of a data provider are analyzed, and defined information recorded previously in or attached to respective image data are read, §0068, lines 1-5); and

generating a folder name or a file name relating to the piece of the image data, based on the piece of the code information thus extracted (e.g. in the folder name

generating means, a name of the folder that stores therein image data is generated in accordance with a rule determined beforehand, referring to defined information obtained through reading, §0069, lines 1-3 and 9-11).

Regarding claim 16, Igarashi discloses the data storage device, further comprising a controller capable of:

determining whether or not the piece of code information is extracted (§0069, lines 3-9); and

generating the folder name or the file name relating to the piece of image data based on predetermined information, when determining that the piece of code information is not extracted (§0069, lines 1-3 and 9-11).

Regarding claim 18, Igarashi discloses the data storage device, further comprising a controller capable of:

generating in the storage medium a folder of a generated folder name (e.g. in the folder name generating means, a name of the folder that stores therein image data is generated in accordance with a rule determined beforehand, referring to defined information obtained through reading, §0069, lines 1-3 and 9-11); and

changing the folder name or the file name relating to a piece of image data stored in the storage medium, to the generated folder name or file name (§0063, lines 1-5).

Regarding claim 19, Igarashi discloses the data storage device, further comprising a controller capable of:

receiving a selection of one of a first processing and a second processing (§0051, lines 1-12);

generating in the storage medium the folder of the generated folder name, when the selection of the first processing is received (§0069, lines 1-3 and 9-11), and

changing the folder name or the file name relating to the image data stored in the storage medium, to the generated folder name or the file name, when the selection of the second processing is received (§0063, lines 1-5).

Regarding claim 20, Igarashi discloses an information transmitter that transmits information to outside, comprising:

an image pickup unit (e.g. data control structure memory means 6, Fig. 2, that stores therein a data control structure owned by data of memory means 2, §0035, lines 3-5);

a code extraction unit for acquiring a code from a piece of image data obtained by picking up an image by the image pickup unit (e.g. data reading means 7, Fig. 2, that reads data through photographing equipment, §0035, lines 5-6);

a decoding unit for analyzing the code thus acquired and acquires a piece of code information (e.g. data control structures 8 and 9, Fig. 2); and

a communication unit for transmitting the acquired piece of code information to outside (e.g. communication network, §0035, lines 18-19).

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Regarding claim 21, Igarashi discloses the information transmitter, further comprising:

a display unit for displaying the acquired piece of code information (e.g. monitor in Fig. 15); and

an operation unit for receiving an instruction whether or not the displayed piece of code information is transmitted (e.g. CPU in Fig. 4), wherein

the communication unit transmits the piece of code information when an instruction to transmit the piece of code information is received (e.g. communication network in Fig. 15).

Regarding claim 22, Igarashi discloses the information transmitter, further comprising a controller capable of encoding the acquired piece of code information (e.g. data control structures 8 and 9, Fig. 2), wherein

the communication unit transmits the encoded piece of code information (e.g. communication network in Fig. 15).

Regarding claim 23, Igarashi discloses the information transmitter, wherein the decoding unit includes a plurality of decoders respectively corresponding to different codes, for analyzing the acquired code to acquire the piece of code information (§0041, lines 1-6), and

the information transmitter further comprises a decoder selection unit for selecting, based on the code acquired by the code extraction unit, a decoder to analyze the code from the plurality of decoders (§0055, lines 4-7), wherein

the decoder selected by the decoder selection unit analyzes the code acquired by the code extraction unit (e.g. data control structure 9 in Fig. 2).

Regarding claim 24, Igarashi discloses the information transmitter, further comprising a controller capable of storing the code acquired by the code extraction unit and the piece of code information obtained by analyzing the acquired code, for each decoder selected by the decoder selection unit (e.g. data control structure 8 and 9 in Fig. 2).

Regarding claim 25, Igarashi discloses a data storage system, comprising: the information transmitter according to claim 20 (e.g. communication network, §0035, lines 18-19); and

a data storage device for storing data in a hierarchical structure (e.g. memory means 2 in Fig. 1), the data storage device comprising:

a communication unit for receiving the piece of code information transmitted from the information transmitter (e.g. Data control structure 6 in Fig. 2), and

a controller capable of generating a folder name or a file name relating to the data, based on the received piece of code information (e.g. Data control structure 8 and 9 in Fig. 2).

Regarding claim 26, Igarashi discloses an information processing system, comprising:

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the information transmitter according to claim 20 (e.g. communication network, §0035, lines 18-19); and

an information processor that performs a predetermined processing based on the piece of code information transmitted from the information transmitter (e.g. Operation processing 4 in Fig. 1).

### Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi et al. (hereinafter referred to as Igarashi), US Pub. Number 2004/0122866A1 above, and further in view of Hatanaka, US Patent Number 6,438,320 B1.

Regarding claims 4 and 17, Igarashi does not explicitly discloses:

reporting a message that the piece of code information is not extracted, when determining accordingly.

Hatanaka teaches: the file structure in the memory area of the card is examined and a check is made to see if the file of the file name exists in the route directory. If the file of such a file name exists, since the director of the same name cannot be formed, and a message to notify the user of the reason id displayed on a display apparatus (Hatanaka: col. 6, lines 1-7). Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify the data control structure discloses by Igarashi with reporting a message as shown by Hatanaka in order to manage the file structure of a storage device.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CECILE VO whose telephone number is (571)270-3031. The examiner can normally be reached on Mon - Thu (9AM - 5:00PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali can be reached on 571-272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 26, 2008

/Cecile Vo/ Examiner Art Unit 2169

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/HUNG Q PHAM/ Primary Examiner, Art Unit 2168

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